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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,931	04/20/2006	Neil Macfarlane	DSM-08-US	2810
50446 7590 12/10/2010 HOXIE & ASSOCIATES LLC 75 MAIN STREET, SUITE 301 MILLBURN, NJ 07041				
EXAMINER				
PADEN, CAROLYN A				
ART UNIT		PAPER NUMBER		
1781				
MAIL DATE		DELIVERY MODE		
12/10/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/576,931

**Applicant(s)**

MACFARLANE, NEIL

**Examiner**

Carolyn A. Paden

**Art Unit**

1781

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4,6-14 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-14 and 16-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 7, 2010 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 6-10, 14 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertoli (5,679,809) in view of Kendrick (EP 0999259) and further in view of Going (3,186,854).

Bertoli discloses the preparation of ethyl esters of polyunsaturated fatty acids. In example 1 oil is deodorized and refined and then the ethyl esters are prepared, filtered and evaporated (Column 4, lines 4-26). Finally the refined product is further stabilized by adding alpha tocopherol and ascorbyl palmitate (column 4, lines 36-40). In example 3, fish oil is

processed by the same method and the final product is disclosed in Table 4 to contain both fish oil and ethyl esters. The yield of gamma linolenic acid is disclosed to be 56% in example 2.

The claims appear to differ from Bertoli in the recitation of the inclusion of rosemary or sage extract in the stabilizing treatment composition that also contains ascorbyl palmitate and tocopherols.

Kendrick teaches the preparation of food grade edible oils that include poly unsaturated fatty acids. Here marine oil is deodorized in the presence of 0.1-0.4% rosemary or sage extract as well as 0.01-0.03% ascorbyl palmitate and 0.05-0.2% tocopherols (see abstract). On page 12, Table 9, samples 2, 3 and last sample, an antioxidant composition containing the required components of the claims is shown to be used before deodorization. The concept of adding the antioxidant components after deodorization is also indicated in this table. It would have been obvious at the time of applicants' invention to include the rosemary and sage extract, ascorbyl palmitate and tocopherols of Kendrick in the stabilizing treatment of Bertoli to further stabilize the oil and polyunsaturated ethyl esters against oxidation.

The claims also appear to differ from Bertoli in the inclusion of a crystallization inhibitor. Going teaches that lecithin is a known crystallization inhibitor used in edible oil blends (see column 3, lines 44-46). It is appreciated that a crystallization inhibitor is not mentioned in Bertoli, but one of ordinary skill in the art would be expected to use a crystallization inhibitor in an edible oil treating process to prevent solidification of the oil upon cold storage.

It is appreciated that more than 50% of PUFA ethyl esters is not mentioned but the extent of PUFA ethyl esters obtained in Bertoli is seen to be dependent upon the extent of PUFA fatty acids in the starting material.

Claims 2, 11-13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertoli (5,679,809) in view of Kendrick (EP 0999259) and further in view of Going (3,186,854) as applied to claims 1, 4, 6-10 and 14-20 above, and further in view of Baileys (Hui).

The claims appear to differ from Bertoli in the recitation of the inclusion of citric acid as a further additive and in the recitation of the deodorizing conditions. It is appreciated that Bertoli does not mention vacuum steam deodorization but vacuum steam deodorization is known in the art of edible oil processing. Bailey's teaches that it is known in the art

to remove dissolved oxygen from oil by deaerating the oil at over about 120C (page 357, 2<sup>nd</sup> paragraph). Steam stripping is disclosed as known in the art at page 358). Vacuum systems are known in the art to be used at 0.5-0.8 kPa and consist of three steam ejectors. It would have been obvious to one of ordinary skill in the art to treat the oil of Bertoli by the process of Baileys in order to deodorize the oil. It is also appreciated that citric acid is not mentioned. Baileys teaches that it is known in the art to include an antioxidant, such as 0.005-0.01% citric acid in deodorized oil (page 357, 4<sup>th</sup> paragraph). It would have been obvious to one of ordinary skill in the art to include citric acid in the deodorized oil of Bertoli in order to stabilize the oil against oxidation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached by dialing 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1781

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Art Unit: 1781

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